

CLAIMS

1. Antenna made in patch technology including a series of strands (210, 220, 230, 240) located substantially in one and the same main plane, each of the strands being powered by one and the same conducting wire (100),
5 characterised in that each of these strands (210, 220, 230, 240) describes an initial segment (312) which is radial relative to a geometric axis (X) perpendicular to the main plane, then each of the strands is extended along a circle arc (214) centred on this geometric axis (X), then
10 describes again a substantially radial segment (216), directed in the direction of the geometric axis (X), thus running alongside a radial segment (212) of the neighbouring strand without touching it.

2. Antenna according to claim 1, characterised in that
15 the power wire (100) of the strands (210, 220, 230, 240) is constituted by a rigid rectilinear wire (100) merged with the geometric axis (X).

3. Antenna according to any one of claims 1 or 2, characterised in that each strand (210, 220, 230, 240)
20 describes a circle arc (214) according to one and the same direction of rotation around the axis (X), in such a way that for each strand (210, 220, 230, 240) considered, the radial end segment (216) of this strand (210, 220, 230, 240) runs alongside an initial radial segment (222) of a
25 neighbouring strand.

4. Antenna according to any one of the previous claims, characterised in that the array of strands (210, 220, 230, 240) describes a circular perimeter of diameter

substantially equal to $\lambda/4$ where λ is the favoured working wavelength of the antenna.

5 5. Antenna according to any one of the previous claims, characterised in that the antenna also includes a conducting plane (300) parallel to the main geometric plane including the strands (210, 220, 230, 240), which forms the ground plane of the antenna.

10 6. Antenna according to the previous claim, characterised in that the power wire (100) is constituted by the central conductor (100) of a coaxial conductor, and in that the ground plane (300) is supplied with power by the external armature (150) of this coaxial conductor.

15 7. Antenna according to the previous claim, characterised in that the central conductor (100) of the coaxial cable has its end in contact with the strands (210, 220, 230, 240) and the external armature (150) of the coaxial cable has its end in contact with the ground plane (300).

20 8. Antenna according to any one of the claims 5 to 7, characterised in that the ground plane (300) forms a full disk of diameter substantially equal to the diameter of the shape described by the array of strands (210, 220, 230, 240).

25 9. Antenna according to any one of the previous claims, characterised in that the strands are four in number, each describing by their circular portion a circle arc (214) describing an angle of about 90° .

10. Antenna according to any one of the previous claims, characterised in that it has several series of

strands (210, 220, 230, 240), each series being formed by coplanar strands in a particular main plane, each of these series of strands (210, 220, 230, 240) describing a general disk shape, and these discs being superposed overlapping
5 each other and with different diameters.

11. Antenna according to any one of the previous claims, characterised in that several series of strands (210, 220, 230, 240) of substantially equal or different diameter are superposed, the strands being or not being in
10 contact with each other, in such a way that a multi-frequency mode operation is obtained.